Goldberg cites provides evidence that an age gap as small as that involved here (late 40s versus 55) produces the effect that she describes. Neither the Lawrence (1988) paper nor the Perry and Finkelstein (1999) paper cited by Dr. Goldberg discuss the effects of such a small age gap between a manager in his late 40s and a high-level employee in his mid-50s. And it is noteworthy that in the study of her own that Dr. Goldberg cites in this section of her Report, she and her fellow researchers placed Mr. Gorman and Mr. Sullivan *in the same subjective age range grouping* (ages 46-55) (see Shore et al., 2003, p. 531). In other words, in her research but not in this litigation, Mr. Goldberg considers Mr. Gorman and Mr. Sullivan as being of comparable subjective age.

# 6. Youth Stereotypes

- 62. Finally, Dr. Goldberg opines that Mr. Gorman held a youth-based stereotype for the job in question. That conclusion flies in the face of Dr. Goldberg's own research, which has found that the financial services industry is an "older age" typed industry and management jobs are "older-age" typed jobs (see Goldberg et al., 2004, pp. 815-816, Tables 1 and 2).
- 63. Dr. Goldberg selected quotes from Mr. Sullivan's deposition and then interpreted them to mean that Mr. Gorman wanted youthful types in the company, yet these quotes can be interpreted in multiple ways, including as showing that Mr. Gorman valued experience, wisdom, and people management skills that come with longer work histories. Consistent with this interpretation, Mr. Gorman ultimately retained Ms. Black, who was older than Mr. Sullivan. As with so many parts of Dr. Goldberg's Report, we see her ignoring evidence that directly contradicts her opinions.

# IV. Unreliable Methodology and Insupportable Conclusions

64. Dr. Goldberg opines: (a) that "Mr. Gorman terminated Edward Sullivan because of his age" (Goldberg Report, p. 2); (b) that "Mr. Gorman has[] effectively confessed to

terminating Mr. Sullivan based on ageist stereotypes" (Goldberg Report, p. 4); (c) that "[b]eyond Mr. Gorman's admission, the situational factors surrounding Mr. Sullivan's termination provide an overwhelming amount of circumstantial evidence pointing to age discrimination at Morgan Stanley" (Goldberg Report, p. 4).

- 65. Dr. Goldberg acknowledges that she formed her opinions based on selected litigation materials and "several scholarly articles" (Goldberg Report, p. 5). Dr. Goldberg does not disclose how the materials she lists were selected for review or why other materials not listed might have been excluded.
- 66. Rather than rely on any data analytic technique of the type that personnel psychologists, or social scientists more generally, would rely on to reach sound scientific conclusions, Dr. Goldberg indicates that she applied her judgment to the materials she read to decide whether Mr. Gorman terminated Mr. Sullivan because of his age through the use of age-based stereotypes (Goldberg Report, p. 3).
  - 67. Dr. Goldberg's approach is problematic for a number of reasons.
- 68. First, it is impossible to perform a scientific analysis of causation based on a single incident. This limitation on the scientific method arises from what Holland (1986) calls the "Fundamental Problem of Causal Inference": A causal inference can only be drawn from observing the value of a dependent variable both in the presence and in the absence of an independent (or putatively causal) variable; because the dependent variable cannot hold two values simultaneously, it is logically impossible to draw a causal inference from a single observation. Because only a single observed incident is the focus (i.e., the termination of Mr. Sullivan), Dr. Goldberg could not reach any scientifically sound conclusion about the influence of Mr. Sullivan's age on his termination in this case.

- 69. Second, in addition to only having a single incident, which precludes a systematic investigation of causality, Dr. Goldberg's Report develops a false assumption, and then generalizes to a specific instance with it. For example, Dr. Goldberg falsely assumes that "judgments and instincts are synonymous with stereotypes" (Goldberg Report, p. 4). Then, based on this assumption, Dr. Goldberg concludes that because Mr. Gorman used his "instinct" in making a business decision, he was stereotyping Mr. Sullivan on the basis of age (Goldberg Report, p. 3).
- 70. Third, Dr. Goldberg does not contend that she employed any specific scientific technique or test for the effect of age on Mr. Sullivan's employment, and indeed she has used none. Instead, as noted above, she simply reviewed litigation materials and a sparse collection of the literature, and ultimately indicates that she relied on her own judgment to assess the importance of Mr. Sullivan's age relative to other important factors that might have formed the basis for his termination. From a scientific perspective this approach can, at best, generate hypotheses for future testing concerning causation; it cannot support the type of definitive, unqualified conclusions about age as the cause of Mr. Sullivan's termination that Dr. Goldberg offers here. In other words, Dr. Goldberg's opinions about causation are not the result of any scientifically valid methodology. In my opinion, no reputable scientific peer-reviewed journal within industrial-organizational psychology would accept the method that Dr. Goldberg applied to the materials in this case as a scientifically adequate method for reaching causal conclusions about age discrimination.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> A large literature describes the difficulties with the sort of case-study approach that Dr. Goldberg applied here and explains why it is not widely used in fields that seek to pinpoint cause-and-effect relations between variables (see, e.g., Dawes, 2001, p. 113; King et al., 1994, p. 211; Lijphart, 1975, p. 160).

- 71. Dr. Goldberg's approach, rather than being a scientific analysis of causation, most closely resembles an attempt at content analysis of the litigation materials to find those pieces of evidence indicating that age stereotypes *might* have been at work (although even a proper content analysis of the case materials could not lead to scientifically valid causal conclusions given the single event at issue here). Yet Dr. Goldberg's analysis fails even to satisfy basic requirements for conducting a systematic and objective content-analytic study.
- 72. In this regard, materials included in a content analysis should be selected in a way that protects against selection and confirmation biases.<sup>5</sup> Quotations and anecdotes extracted from a subset of litigation documents in an unknown fashion do not qualify as reliable data because of the risk that only an unrepresentative subset of data has been considered and, consequently, the risk that contrary evidence has been ignored (see Creswell, 2003; King et al., 1994; Singleton & Straits, 1999).
- 73. Research on judgmental biases indicates that the personal predilections of experts and laypeople alike can bias their subjective assessments of cases (e.g., Lord et al., 1979; Munro et al., 2004). Dr. Goldberg is obviously aware of this risk—after all, a central theme of her Report is a criticism of Mr. Gorman's use of subjective judgment. Nonetheless, as an expert scientist she proceeded a subjective analysis, not a scientific analysis with precautions that seek to guard against selection and confirmation biases.
- 74. My review of the materials that Dr. Goldberg considered for purposes of her Report, together with the quotations and anecdotes that Dr. Goldberg chose to list in her Report, reveals that Dr. Goldberg either consciously or unconsciously chose to ignore considerable

<sup>&</sup>lt;sup>5</sup> Selection bias arises when one samples documents in a fashion that favors one side over the other; confirmation bias arises when – within the sample of evidence that one considers – one fails to build in methodological checks on the natural human tendency to give more weight to evidence that favors one's side.

evidence that did not support her opinions, and conversely, she chose to interpret or portray the evidence that she does cite in a tendentious manner.

- 75. Examples of evidence from the depositions that Dr. Goldberg ignored and undercut her opinion that Mr. Sullivan was terminated because of his age:
  - Mr. Sullivan replied "no" to the question "Did you ever hear Mr. Gorman ever make an age-based joke or comment?" (Sullivan Deposition, pp. 107-108).
  - Mr. Sullivan replied "no" to the question "Do you have any facts to support a belief that Mr. Gorman might have discriminated against you based on your age?" (Sullivan Deposition, p. 108).
  - Mr. Sullivan's age was never raised at the woodshed meeting (Hanan Deposition, p. 255).
  - Despite being several years older than Mr. Sullivan (Gorman Deposition, p. 230), Mr. Gorman retained Ms. Black, one of Sullivan's peers, as a regional director (Gorman Deposition, pp. 110-111, 128-129; Plaintiff's Exhibit 45).
  - Mr. Sullivan had guardianship issues at the same time that Morgan Stanley was responding to regulatory expectations by making compliance and guardianship issues a major factor in its operations and in its review process (Sanchez Deposition, pp. 101, 113, 115-116, 121; Hanan Deposition, p. 219; Nahari Deposition, pp. 38, 58, 92, 195, 223, 243-244; Kayne Deposition pp. 109-110, 155-156, 161-163, 232; Brodsky Deposition, p. 259; Plaintiff's Exhibit 77). For example, Mr. Sullivan

indicates in his 2005 letter to Mr. Harris that he "was involved in some decisions that exercised poor judgment" when it came to "not terminating FAs in a timely manner" (Defendant's Exhibit 29, MS000154). Numerous depositions support this admission (e.g., for Mr. McNamara, see Sanchez Deposition, pp. 56-57, 68, 71, 192; Hanan Deposition, pp. 89, 94-95, 233, 275; Kayne Deposition, pp. 81-82, 89-91, 93, 96, 136-137; for Mr. McGroarty, see Sanchez Deposition, pp. 87, 191, Kayne Deposition, pp. 250-251; Hanan Deposition, p. 178; Nahari Deposition, pp. 210-211; Kayne Deposition, p. 111; for Mr. T. Monastero, see Kayne Deposition, p. 50, 59-60, 69-70; for Mr. Lewis, see Kayne Deposition, pp. 53-55; for general compliance issues, see Hanan Deposition, pp. 267, 272; Nahari Deposition, p. 205).

- Mr. Sullivan was consistently ranked as one of the weakest regional directors in interviews conducted by Mr. Gorman with approximately 30 members of senior-level management (Gorman Deposition, pp. 120-121, 123-125, 160; Sanchez Deposition, p. 123; Hanan Deposition, p. 252).
- Mr. Gorman's stated reliance on factors other than Mr. Sullivan's age: (1)
   Sullivan's downward compensation trend, (2) Sullivan's poor rankings
   from other Morgan Stanley executives, and (3) Sullivan's presentation
   during his meetings with Mr. Gorman (Gorman Deposition, pp. 147-150, 153, 160-161).
- 76. Examples of evidence from the depositions that Dr. Goldberg portrays in a tendentious manner to support her opinions include the following:

- Twice Dr. Goldberg cites Mr. Sullivan as saying "I was always trying to improve my technology skills" (Goldberg Report, pp. 9, 14; Sullivan Deposition p. 169), but what she fails to mention is that the question Mr. Sullivan was addressing was "Do you believe you had any areas that needed improvement, Mr. Sullivan?" In other words, Mr. Sullivan was implying that he has a deficit in technology skills that he was seeking to remedy; he also self-acknowledged technology as an area in need of development on his Annual 2000 Self Report (Defendant's Exhibit 2, MS 000047). Thus any employee remarks concerning Mr. Sullivan's lack of technology skills might be consistent with this self-acknowledged deficit, rather than being consistent with age stereotyping.
- Dr. Goldberg asserts that statements by Mr. Gorman about change and adaptation were indicators of age discrimination (Goldberg Report, pp. 7, 10-11), Mr. Sullivan uses the same sort of statements in his consideration of a younger employee at Morgan Stanley. Referring to a younger employee (Mr. Mahon), Mr. Sullivan speculated, "I think he had difficulties adapting, so I don't think his performance was viewed as very positive" (Sullivan Deposition, p. 113).
- When asked about any shortcomings in 2000, after three years in his syndicate desk position, Mr. Sullivan states that there was an "adaptation stage" for him in serving as a liaison (Sullivan Deposition, p. 134). Again, Dr. Goldberg equates Mr. Gorman's statements about Mr. Sullivan having

- trouble adapting as statements of age discrimination (Goldberg Report, p. 7), yet Mr. Sullivan applies such statements to his own performance.
- Dr. Goldberg provides only partial quotations that, standing alone, are misleading. For example, Dr. Goldberg claims that Mr. Gorman's statement in a town hall meeting that the organization should "ensure that young people are given an opportunity" was evidence of an age-biased corporate culture (Goldberg Report, p. 18). But Dr. Goldberg excluded the rest of that statement from Mr. Gorman in which he explains that this "opportunity" was to team with and support Morgan Stanley's more experienced financial advisors (Plaintiff's Exhibit 65).
- 77. These errors, omissions, and mischaracterizations likely would not have occurred if Dr. Goldberg had followed standard scientific practices for conducting a content analysis, which takes a systematic and objective approach. More specifically, Dr. Goldberg apparently did not prepare a written protocol or coding system for evaluating the case materials, contrary to standard practice for content analysis. In her guide to content analysis, Neuendorf (2002) makes clear how fundamental this requirement is:

All measures for human content analysis coding need to be fully explicated in a document called a *codebook*. The codebook corresponds to a *coding form*, which provides spaces appropriate for recording the codes for all variables measured. Together, the codebook and coding form should stand alone as a protocol for content analyzing messages....

The goal in creating codebooks and coding forms is to make the set so complete and unambiguous as to almost eliminate the individual differences

among codes. The construction of an original codebook is a rather involved process, with repeated versions right up until the moment when coding begins. Even the most mundane details need to be spelled out. All instructions should be written carefully and fully. There should be instructions on what is a codable unit ..., and any other instructions on the coding protocol... (p. 132).

- 28. In this case, Dr. Goldberg does not offer any coding system at all or any explanation of how the materials were coded –that a third party could take and apply to the litigation materials to check Dr. Goldberg's coding reliability and determine whether she impartially applied her coding system to the materials. Instead, the coding system utilized by Dr. Goldberg was entirely in her head and was not set out in her Report in a way that would make it subject to replication or testing by others. Neuendorf (2002, p. 142) explains that, in a content analytic study, "it must be confirmed that the coding scheme is *not* limited to use by only one individual... it is important to demonstrate that the obtained ratings are not the idiosyncratic results of one rater's subjective judgment. This means that even if the principal investigator does all of the coding, a reliability check with a second coder is needed...." Dr. Goldberg's use of a subjective system for evaluating the case materials, a system that she failed to reduce to a written procedure so that others could check her work, violates basic scientific tenets of transparency, reliability and replication.
- 79. Furthermore, it is a basic tenet in striving for rigorous and objective research results that individuals coding archival materials should be blind to hypotheses to avoid researcher bias (see generally Creswell, 2003). Dr. Goldberg does not indicate that she was blind to the Plaintiff's hypothesis that he was terminated due to his age before she reviewed the case

materials, and her selective presentation of excerpts from the litigation materials indicates that selection and confirmation biases were at work as a result of not being blind to this hypothesis.

80. The problems with Dr. Goldberg's approach to this case become even more apparent when we consider that her Report connects subjectively selected samples of litigation material with an unrepresentative set of principles from the stereotyping and personnel selection literatures, as I discussed in the immediately prior section.

# V. Conclusion

- 81. In summary, for reasons previously detailed, the research on age stereotyping that Dr. Goldberg cites is selective and limited in scope; it does not fit the facts in this case; and her subjective review of the litigation materials cannot yield reliable conclusions about how stereotypes relate to the termination of Mr. Sullivan.
- 82. It is one thing to say that age stereotypes *may* bias employment decisions, and it is quite another to show that age stereotypes *in this particular case did* bias a decision to terminate Mr. Sullivan. Dr. Goldberg makes the latter strong claim, yet there is nothing in the research literature she cites, nor in her subjective analysis of litigation materials, nor in her attempt to connect the two, that can support that strong claim not from a general scientific perspective or from industrial-organizational psychology in particular.
- 83. In my opinion, Dr. Goldberg did not provide an impartial summary of the age stereotyping and personnel selection literature. She also did not apply the selective studies she cites in a reliable manner to the litigation materials which she also selectively cites.
- 84. Dr. Goldberg states that "even an untrained observer" would see the "evidence of age bias" in the case materials that she reviewed (Goldberg Report, p. 3). She then states that "an expert on age stereotypes" would see "that these concrete illustrations represent but a

handful of countless examples of how age discrimination affected the decision-making process at Morgan Stanley" (Goldberg Report, p. 3). This contention by Dr. Goldberg has no scientific basis, however. Indeed, someone who claims expertise based on training as a social scientist and experience conducting empirical research, as Dr. Goldberg does, should recognize the danger in relying on her own subjective review of a convenience sample of data after she has been informed of the favored hypothesis in a case. If Dr. Goldberg were correct in her view that experts on age stereotyping "know it when they see it," as she basically asserts here, then there would be little use for the scientific method that she and I were trained to follow and that Dr. Goldberg presumably follows outside of the litigation context.

Erederick L. Oswald, Ph.D.

2/21/08

Date

#### References

Allport, G. W. (1954). The nature of prejudice. Reading, MA: Addison-Wesley.

Arvey, R. D., & Murphy, K. R. (1998). Performance evaluation in work settings. *Annual Review of Psychology*. 49, 141-168.

Ashmore, R. D., & Longo, L. C. (1995). Accuracy of stereotypes: What research on physical attractiveness can teach us. In Y.-T. Lee, L. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 63–86). Washington, DC: American Psychological Association.

Cameron, K. S. & Quinn, R. E. (2006). *Diagnosing and changing corporate culture*. San Francisco, CA: Jossey-Bass.

Cleveland, J. N., Festa, R. M., & Montgomery, L. (1988). Applicant pool composition and job perceptions: Impact on decisions regarding an older applicant. *Journal of Vocational Behavior*, 32, 112-125.

Cleveland, J. N., & Landy, F. J. (1983). The effects of person and job stereotypes on two personnel decisions. *Journal of Applied Psychology*, 68, 609-619.

Creswell, J. W. (2003). Research design: Qualitative, quantitative and mixed methods approaches. Thousand Oaks, CA: Sage.

Dawes, R. M. (2001). Everyday irrationality: How pseudoscientists, lunatics, and the rest of us fail to think rationally. Boulder, CO: Westview Press.

Erber, J. T., Caiola, M. A., & Pupo, F. A. (1994). Age and forgetfulness: Managing perceivers' impressions of targets' capability. *Psychology and Aging*, *9*, 554-561.

Ericsson, K. A., Krampe, R. T. & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, *100*, 363-406.

Finkelstein, L. M., & Burke, M. J. (1998). Age stereotyping at work: The role of rater and contextual factors on evaluations of job applicants. *The Journal of General Psychology*, 125, 317-345.

Finkelstein, L. M., Burke, M. J., & Raju, N. (1995). Age discrimination in simulated employment contexts: An integrative analysis. *Journal of Applied Psychology*, 80, 652-663.

Gibson, K. J., Zerbe, W. J., & Franken, R. E. (1993). The influence of rater and ratee age on judgments of work-related attributes. *Journal of Psychology*, 116, 249-254.

Gigerenzer, G. (2007). Gut feelings: The intelligence of the unconscious. New York: Viking.

Goldberg, C. B. (1998). The impact of age of applicants and of the applicant pool on recruiters' assessments. Dissertation Abstracts International Section A: Humanities and Social Sciences. Vol 58 (11-A), May 1998.

Goldberg, C. B., & Cohen, D. J. (2004). Walking the walk and talking the talk: Gender differences on the impact of interviewing skills on applicant assessments. *Group & Organization Management*, 29, 369-384.

Goldberg, C. B., Finkelstein, L. M., Perry, E. L., & Konrad, A. M. (2004). Job an industry fit: The effects of age and gender matches on career progress outcomes. *Journal of Organizational Behavior*, 25, 807-829.

Gordon, R. A., & Arvey, R. D. (2004). Age bias in laboratory and field settings: A meta-analytic investigation. *Journal of Applied Social Psychology*, *34*, 468-492.

Hedge, J. W., Borman, W. C., & Lammlein, S. E. (2006). *The aging workforce: Realities, myths and implications for organizations*. Washington, DC: American Psychological Association.

Hennessey Jr., H. W., & Bernardin, H. J. (2003). The relationship between performance appraisal criterion, specificity, and statistical evidence of discrimination. *Human Resource Management*, 42, 143-158.

Hitt, M. A., & Barr, S. H. (1989). Managerial selection decision models: Examination of configural cue processing. *Journal of Applied Psychology*, 74, 53-61.

Holland, P. W. (1986). Statistics and causal inference. *Journal of the American Statistical Association*, 81, 945-960.

Hough, L. M., & Oswald, F. L. (2000). Personnel selection: Looking toward the future – remembering the past. *Annual Review of Psychology*, *51*, 631-664.

Jussim, L. (2005). Accuracy in social perception: Criticisms, criteria, components, and cognitive processes. In M. Zanna (Ed.), *Advances in Experimental Social Psychology*. New York: Academic Press.

King, G., Keohane, R. O., & Verba, S. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton, NJ: Princeton University Press.

Kite, M. E., Stockdale, G. D., Whitley Jr., B. E., & Johnson, B. T. (2005). Attitudes toward younger and older adults: An updated meta-analytic review. *Journal of Social Issues*, 61, 241-266.

Kunda, Z., & Spencer, S. (2003). When do stereotypes come to mind and when do they color judgment? A goal-based theoretical framework for stereotype activation and application. *Psychological Bulletin*, 129, 522-544.

Lawrence, B. S. (1988). New wrinkles in the theory of age: Demography, norms, and performance ratings. *Academy of Management Journal*, *31*, 309-337.

Liden, R. C., Stilwell, D., & Ferris, G. R. (1996). The effects of supervisor and subordinate age on objective performance and subjective performance ratings. *Human Relations*, 49, 327-347.

Lijphart, A. (1975). The comparable-cases strategy in comparative research. *Comparative Political Studies*, *8*, 158-177.

Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence, *Journal of Personality and Social Psychology*, *37*, 2098-2109.

McDaniel, M. A., Whetzel, D. L., Schmidt, F. L., & Maurer, S. D. (1994). The validity of employment interviews: A comprehensive review and meta-analysis. *Journal of Applied Psychology*, 79, 599-616.

McKay, P. & McDaniel, M. A. (2006). A re-examination of Black-White mean differences in work performance: More data, more moderators. *Journal of Applied Psychology*, 91, 531-554.

Munro, G., Leary, S. P., & Lasane, T. P. (2004). Between a rock and a hard place: Biased assimilation of scientific information in the face of commitment. *North American Journal of Psychology*, *6*, 431-444.

Neuendorf, K. A. (2002). The content analysis guidebook. Thousand Oaks, CA: Sage.

Ottati, V., & Lee, Y. (1995). Accuracy: A neglected component of stereotype research. In Y. Lee, L. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 29-59), Washington, D.C.: American Psychological Association.

Pendry, L. F., & Macrae, C. N. (1999). Cognitive load and person memory: The role of perceived group variability. *European Journal of Social Psychology*, 29, 925-942.

Perry, E. L., & Finkelstein, L. M. (1999). Toward a broader view of age discrimination in employment: A joint consideration of organizational factors and cognitive processes. *Human Resource Management Review*, 9, 21-49.

Revenson, T. A. (1989). Compassionate stereotyping of elderly patients by physicians. *Psychology and Aging*, *4*, 230-234.

Rosen, B., & Jerdee, T. H. (1976a). The influence of age stereotypes on managerial decisions. *Journal of Applied Psychology*, *61*, 429-432.

Rosen, B., & Jerdee, T. H. (1976b). The nature of job-related age stereotypes. *Journal of Applied Psychology*, 61, 180-183.

Rosenthal, R., & DiMatteo, M. R. (2001). Meta-analysis: Recent developments in quantitative methods for literature reviews. *Annual Review of Psychology*, 52, 59-82.

Roth, P. L., Huffcutt, A. I., & Bobko, P. (2003). Ethnic group differences in measures of job performance: A new meta-analysis. *Journal of Applied Psychology*, 88, 725-740.

Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124, 262-274.

Shore, L. M., Cleveland, J. N., & Goldberg, C. B. (2003). Work attitudes and decisions as a function of manager age and employee age. *Journal of Applied Social Psychology*, 88, 529-537.

Singleton, R., & Straits, B. (1999), *Approaches to social research* (3rd Ed.), Oxford: Oxford University Press.

Society for Industrial and Organizational Psychology (2003). *Principles for the validation and use of personnel selection procedures*. Bowling Green, OH: Author.

Weiss, E. M., & Maurer, T. J. (2004). Age discrimination in personnel decisions: A reexamination. *Journal of Applied Social Psychology*, 34, 1551-1562.

## Exhibit A: Curriculum Vitae

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# **Employment**

Aug 2006-present
Michigan State University, East Lansing MI
Associate Professor, Department of Psychology - Industrial/Organizational
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## Memberships

American Psychological Association (APA) – 1999-present American Psychological Society (APS) – 2004-present Society of Industrial and Organizational Psychology (SIOP) – 1999-present Evaluation, Measurement, and Statistics – APA Div 5 – 2002-present

## **Professional Service - External**

Editorial Boards

Journal of Applied Psychology (2005-present), International Journal of Selection and Assessment (2003-present), Journal of Management (2003-present), Organizational Research Methods (2007-present)

Ad Hoc Reviewer

Personnel Psychology, O rganizational Behavior and Human Decision Processes, Journal of Occupational and Organizational Psychology, Applied Psychology: An International Review, Journal of Personality and Social Psychology, Multivariate Behavioral Research, Psychological Methods, Applied Psychological Measurement, British Journal of Mathematical and Statistical

Psychology, Learning and Individual Differences, Europe an Journal of Psychology, Journal of Memory and Language, Psy chology and Aging, Me asurement and Evaluation in Counseling and Development, Basic and Applied Social Psychology, Journal of Abnormal Child Psychology, Journal of Counseling Psychology, Journal of Clinical Child and Adolescent Psychology, American Journal of Evaluation

### International Reviewer

Netherlands Organization for Scientific Research, Social Sciences (2007), Standard Research Grants program of the Social Sciences and Humanities Research Council of Canada (2007) *Conference Reviewer* 

APA Division 14 (SIOP) Program Reviewer, 1999-2007

APA Division 5 (Evaluation, Measurement, and Statistics) Program Reviewer, 2001-2007

Academy of Management Program Reviewer - OB Division, 2003-2007

Academy of Management Program Reviewer – Research Methods Division, 2004-2007 Conference Committees

APA Division 14 (SIOP) Owens Award Committee, 2004, 2005, 2006

APA Division 14 (SIOP) Electronic Communications Committee, 2004, 2005, 2007, 2008

APA Division 14 (SIOP) Ad Hoc Web Committee, 2003-2005

APA Division 14 (SIOP) Strategic Program Planning Subcommittee, 2002-2003

Academy of Management Research Methods Division - Awards Committee, 2002, 2003

Academy of Management HR Division - Best Student Paper Award Committee, 2005

APA Division 14 (SIOP) Ad Hoc APA Ethics Code Review Committee, 2001

APA Division 14 (SIOP) Scientific Affairs Committee, 1999-2001

Advisory Boards

Human Resource Management Center, Skillsurvey

## Publications - Peer-reviewed

Converse, P. D., Oswald, F. L., Imus, A., Hedricks, C., Roy, R., & Butera, H. (in press). Comparing personality test formats and warnings: Effects on criterion-related validity and test-taker reactions. *International Journal of Selection and Assessment*.

Converse, P. D., Wolfe, E. W., Huang, X., & Oswald, F. L. (in press). Response rates for mixed-mode surveys using mail and email/web. *American Journal of Evaluation*.

Friede, A. J., Oswald, F. L., Schmitt, N., Merritt, S., Imus, A., Kim, B., Shivpuri, S. (in press). Estimating trait and situational variance in a situational judgment test. *Human Performance*. Wessel, J. L., Ryan, A. M., & Oswald, F. L. (in press). The relationship between objective and perceived fit with an academic major, adaptability, and major-related outcomes. *Journal of Vocational Behavior*.

Schmitt, N., Oswald, F. L., Friede, A., Imus, A., & Merrit, S. (in press). Perceived fit with an academic environment: Attitudinal and behavioral outcomes. *Journal of Vocational Behavior*. LeBreton, J., Griepentrog, B., Hargis, M. B., Oswald, F. L., Ployhart, R. E. (2007). A multidimensional approach for evaluating variables in organizational research and practice. *Personnel Psychology*, 60, 475-498.

Hambrick, D. Z., Meinz, B., & Oswald, F. L. (2007). Individual differences in current events knowledge: Contributions of ability, personality, and interests. *Memory and Cognition*, *35*, 304-316.

- Schmitt, N., Oswald, F. L., Kim, B. H., Imus, A., Drzakowski, S., Friede, A., & Shivpuri, S. (2007). The use of background and ability profiles to predict college student outcomes. *Journal of Applied Psychology*, 92, 165-179.
- Ramsay, L. J., Schmitt, N., Oswald, F. L., Gillespie, M. A. (2006). The impact of situational context variables in responses to situational judgment and biodata inventory items. *Psychology Science*, 48, 268-287.
- Donnellan, M. B. \*, Oswald, F. L.\*, Baird, B. M., & Lucas, R. E. (2006). The Mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18, 192-203. \*order arbitrary
- Hönekopp, J., Becker, B. J., & Oswald, F. L. (2006). The meaning and suitability of various effect sizes for structured rater 'ratee designs. *Psychological Methods*, 11, 72-86.
- Shivpuri, S., Schmitt, N., Oswald, F. L., & Kim, B. H. (2006). Individual differences in academic growth: Do they exist, and can we predict them? *Journal of College Student Development*, 47, 69-86.
- Schmitt, N., & Oswald, F. L. (2006). The impact of corrections for faking on the validity of noncognitive measures in selection settings. *Journal of Applied Psychology*, 91, 613-621.
- Oswald, F. L., Friede, A. J., Schmitt, N., Kim, B. K., & Ramsay, L. J. (2005). Extending a practical method for developing alternate test forms using independent sets of items. *Organizational Research Methods*, 8, 149-164.
- Hough, L. M., & Oswald, F. L. (2005). They're right...well, mostly right: Research evidence and an agenda to rescue personality testing from 1960's insights. *Human Performance*, 18, 373-387. Hambrick, D. Z., & Oswald, F. L. (2005). Does domain knowledge moderate involvement of working memory capacity in higher-level cognition? A test of three models. *Journal of Memory and Language*, 52, 377-397.
- Converse, P. D., Oswald, F. L., Gillespie, M. A., Field, K. A., & Bizot, E. B. (2004). Matching individuals to occupations using aptitudes and the O\*NET: Issues and an application in career guidance. *Personnel Psychology*, *57*, 451-487.
- Converse, P. D., & Oswald, F. L. (2004). The effects of data type on job classification and its purposes. *Psychology Science*, 46, 99-127.
- Oswald, F. L., Schmitt, N., Kim, B. H., Ramsay, L. J., & Gillespie, M. A. (2004). Developing a biodata measure and situational judgment inventory as predictors of college student performance. *Journal of Applied Psychology*, 89, 187-207.
- Ployhart, R. P., & Oswald, F. L. (2004). Applications of mean and covariance structure analysis: Integrating correlational and experimental approaches. *Organizational Research Methods*, 7, 27-65.
- Schmitt, N., Oswald, F. L., Kim, B. H., Gillespie, M. A., & Ramsay, L. J. (2004). The impact of justice and self-serving bias explanations for the perceived fairness of different types of selection tests in college admissions. *International Journal of Selection and Assessment, 12,* 160-171. Schmitt, N., Oswald, F. L., Kim, B. H., Gillespie, M. A., Ramsay, L. J., & Yoo, T. (2003). Impact of elaboration on social desirability and the validity of biodata measures. *Journal of*
- Applied Psychology, 88, 979-988. Hough, L. M., Oswald, F. L., & Ployhart, R. E. (2001). Determinants, detection, and amelioration of adverse impact in personnel selection procedures: Issues, evidence, and lessons learned. *International Journal of Selection and Assessment*, 9, 152-194.
- Oswald, F. L., Saad, S. A., & Sackett, P. R. (2000). The homogeneity assumption in differential prediction analysis: Does it really matter? *Journal of Applied Psychology*, 85, 536-541.

Hough, L. M., & Oswald, F. L. (2000). Personnel selection. *Annual Review of Psychology*, 51, 631-664.

Oswald, F. L., & Ferstl, K. L. (1999). Linking a structure of vocational interests to Gottfredson's (1986) Occupational Aptitude Patterns Map. *Journal of Vocational Behavior*, *54*, 214-231. Oswald, F. L., & Johnson, J. W. (1998). On the robustness, bias, and stability of results from meta-analysis of correlation coefficients: Some initial Monte Carlo findings. *Journal of Applied Psychology*, *83*, 164-178.

Johnson, J. W., Schneider, R. J., & Oswald, F. L. (1997). Toward a taxonomy of managerial performance profiles. *Human Performance*, 10, 227-250.

# **Publications - Book Chapters**

Oswald, F. L., Hambrick, D. Z., & Jones, L. A. (2007). Keeping all the plates spinning: Understanding and predicting multitasking performance. In D.H. Jonassen (Ed.), *Learning to solve complex scientific problems* (pp. 77-97). Mahwah, NJ: Erlbaum.

Converse, P. D., Oswald, F. L., Imus, A., Hedricks, C., Roy, R., Butera, H., & Kiefer, T. (2006). Forcing choices in personality measurement: Benefits and limitations. In R. Griffith (Ed.), *A closer examination of applicant faking behavior* (pp. 263-282). Greenwich, CT: Information Age Publishing.

Schmitt, N., Oswald, F. L., & Gillespie, M. A. (2004). Broadening the performance domain in the prediction of academic success. In W. F. Camara and E. Kimmel (Eds.), *Choosing students: Higher education admission tools for the 21st century* (pp. 195-213). Mahwah, NJ: Erlbaum. Schmitt, N., & Oswald, F. L. (2004). Statistical weights of ability and diversity in selection decisions based on various methods of test score use. In H. Aguinis (Ed.), *Test score banding in human resource selection: Legal, technical, and societal issues* (pp. 113-131). Westport, CT: Ouorum Books.

Deller, J., Oswald, F. L., & Schoop, U. S. (2003). Personality scales and process-oriented career development for senior management. In F. Avallone, H. K. Sinangil, A. Caetano (Eds.), *Identity and diversity in organizations*. Milan, Italy: Guerini Studio.

Oswald, F. L., & McCloy, R. A. (2003). Meta-analysis and the art of the average. In K. R. Murphy (Ed.), *Validity generalization: A critical review* (pp. 311-338). Mahwah, NJ: Erlbaum. Ford, J. K., & Oswald, F. L. (2003). Understanding the dynamic learner: Linking personality traits, learning situations, and individual behavior. In M. Barrick & A. M. Ryan (Eds.), *Personality and work*. San Francisco: Jossey-Bass.

Deller, J., Oswald, F. L., & Schoop, U. S. (2002). debis Career Development Center: Personality scales within a process-oriented development instrument for management high-potentials. In S. Sonnentag (Ed.) *Psychological management of individual performance*. New York: Wiley. Campbell, J. P., Gasser, M. B., & Oswald, F. L. (1996). The substantive nature of job performance variability. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations*. San Francisco: Jossey-Bass.

### Other Publications

# **Encyclopedia Entries**

Oswald, F. L., & Converse, P. D. (2007). Job typologies. In S. Rogelberg (Ed.), *Encyclopedia of Industrial/Organizational Psychology* (pp. 421-424). Thousand Oaks, CA: Sage.

Oswald, F. L., & Converse, P. D. (2007). Biodata. In S. Rogelberg (Ed.), Encyclopedia of Industrial/Organizational Psychology (pp. 56-57). Thousand Oaks, CA: Sage. Converse, P. D., & Oswald, F. L. (2006) General Aptitude Test Battery. In J. Greenhaus & G. Callanan (Eds.), Encyclopedia of Career Development (pp. 331-333). Thousand Oaks, CA: Sage.

# **Book Reviews**

Oswald, F. L. (2006). [Review of Drasgow, F., & Schmitt, N. (Eds.) (2002). Measuring and analyzing behavior in organizations. San Francisco, CA: Jossey-Bass.] Applied Psychological Measurement, 30, 253-255.

Oswald, F. L. (2003). [Review of Brannick, M. T., & Levine, E. (2002). Job analysis: Methods, research, and applications for human resource management in the new millennium. Thousand Oaks, CA: Sage.] Personnel Psychology, 3, 800-802.

# **Recent Technical Reports**

Oberlander, E. M., Oswald, F. L., Hambrick, D. Z., Jones, L. A. (2007). Individual differences as predictors of error during multitasking. Technical report for Navy Personnel Research, Studies, and Technology (NPRST-TN-07-9). Millington, TN.

Oswald, F. L., Hambrick, D. Z., & Jones, L. A., Ghumman, S. S. (2007). SYRUS: Understanding and predicting multitasking performance. Technical report for Navy Personnel Research, Studies, and Technology (NPRST-TN-07-5). Millington, TN.

### Letters

Donnellan, M. B., Fraley, M. C., & Krueger, R. F. (June 2007). Signatory on reply to Phil Zimbardo's "Banality of Evil" (the reply advocating for person-situation interaction). APS Observer.

### Grants

Navy Personnel Research, Studies, and Technology, 2005-present Multitasking Work Environment in the Navy Culture and Values Project (SYRUS) with Zach Hambrick co-Pl (Department of Psychology, MSU) \$455,000 (51% indirect costs), 2007-2009 \$261,523 (51% indirect costs), 2005-2007 Practical Recommendations for Trait-Level Estimation in the Navy Computer Adaptive Personality System (NCAPS) \$34,108 (51% indirect costs), 2007-2008

The College Board, 2002-present Noncognitive Predictors of College Success with Neal Schmitt (Department of Psychology, MSU) \$574,086 (10% indirect costs) - 2004-2007 \$197,122 (10% indirect costs) - 2003-2004 \$156,000 (10% indirect costs) - 2002-2003 \$75,000 in sponsored graduate student awards

MSU Intramural Research Grant, 2002-2003 Internet Survey Use

with Ed Wolfe (Department of Educational Psychology, MSU) \$75,000

SIOP (APA Division 14) Small Grant Program, 2002 with the Ball Foundation \$2,500

# Awards and Fellowships

2002 - Society for Industrial and Organizational Psychology (APA Div. 14), SIOP Small Grant Award

1997-1998 - Eva O. Miller Fellowship, University of Minnesota

1994-1997 - National Science Foundation Graduate Student Research Fellowship

1996 - Society for Industrial and Organizational Psychology (APA Div. 14), Best Student Paper Award

### **Recent Presentations**

Oberlander, E. M., & Oswald, F. L. (2007). *Individual difference variables as predictors of error during multitasking performance*. Presented at the Skill Decay Workshop, Air Force Research Laboratories Conference, Mesa, AZ.

Oswald, F. L. (2007). Exploring the use of forced-choice personality measures in personnel selection. Discussant. Symposium to be presented at the 22nd Annual Conference of the Society for Industrial and Organizational Psychology (SIOP), New York, NY.

Hambrick, D. Z., Rench, T. A., Jones, L. A., Oswald, F. L., & Moon, N. (2007). *Relations of cognitive and noncognitive variables to strategy use in multitasking*. Symposium to be presented at the 22nd Annual Conference of the Society for Industrial and Organizational Psychology (SIOP), New York, NY.

Campbell, J. P., Knapp, D. J., Pearlman, K., Putka, D. J., Rumsey, M. G., Tremble, T. (2007). *Unsolved issues in personnel selection: Opportunities for scientist-practitioner collaboration*. Academic-practitioner forum to be presented at the 22nd Annual Conference of the Society for Industrial and Organizational Psychology (SIOP), New York, NY.

Converse, P. D., & Oswald, F. L. (2007). A brief note on the r to z' transformation in meta-analysis. Paper to be presented at the 22nd Annual Conference of the Society for Industrial and Organizational Psychology (SIOP), New York, NY.

Oswald, F. L., & Oberlander, E. M. (2007). Adaptive skills and adaptive performance: Today's organizational reality. Session co-chair. Symposium to be presented at the 22nd Annual Conference of the Society for Industrial and Organizational Psychology (SIOP), New York, NY. Oberlander, E. M., & Oswald, F. L. (2007). Individual difference variables as predictors of error during multitasking. Symposium to be presented at the 22nd Annual Conference of the Society for Industrial and Organizational Psychology (SIOP), New York, NY.

Hambrick, D. Z., Rench, T. A., Jones, L. A., Oswald, F. L., & Moon, N. (2007). *Relations of cognitive and noncognitive variables to strategy use in multitasking*. Symposium to be presented at the 22nd Annual Conference of the Society for Industrial and Organizational Psychology (SIOP), New York, NY.

Pachulicz, S., Oberlander, E. M., Oswald, F. L., Daniels, M. A., & Wong, W. Y. (2007). Personality as a predictor of multitasking performance during high-stress versus low stress.

Paper to be presented at the meeting of the American Psychological Association, San Francisco, CA.

# Recent Applied Research and Consulting Experience

Oct 2006-present

Navy Personnel Research, Studies, & Technology, Millington TN

The many facets of the SYRUS project have the ultimate goal of better understanding Sailor multitasking performance in a changing and time-pressured work environment. Ongoing project efforts model and measure multitasking performance and predictors of performance in a multitasking environment.

Feb-Jun 2005

DTE Energy, Detroit MI

Project investigates the prediction of the performance of System Supervisors who manage electrical power grids. Determine the reliability, validity and incremental validity of new measures over existing measures currently implemented.

Sep 2002-present

Caliper Corporation, Princeton NJ

Coordinated four projects in investigating, developing, and extending the battery of tests used in their assessment systems for selection and training/development. These projects address test development, social desirability, situational judgment, and person-job fit.

Apr 2002-present

Human Resources Research Organization (HumRRO), Alexandria, VA

Scientific Review Panel (SRP) member for Select21, a selection and classification project for the U.S. Army, contracted out by the U.S. Army Research Institute for the Behavioral and Social Sciences. Engaged in continued advising on the modeling and prediction of military performance and attrition.

Jun 2000-present

The College Board, Princeton, NJ

Developed an expanded model of college student performance. Worked with graduate students and Dr. Neal Schmitt (MSU) in creating a situational judgment test and biodata instrument measuring dimensions of the model.

# **Teaching Experience**

Personnel Selection (graduate)

[spring 2005, spring 2003 at MSU; fall 1998-spring 2000 at Purdue University]

Individual Differences (graduate)

[spring 2005, fall 2002 at MSU]

Meta-analysis: Concepts and Applications (graduate)

[fall 2001 at MSU, spring 1997 at University of Minnesota]

Seminar in Industrial Psychology (graduate)

[fall 2007, fall 2005 at MSU; fall 1998-spring 2000 at Purdue University]

Design and Measurement (experimental design and measurement; undergraduate) [fall 2005, fall 2004, fall 2003, fall 2002, fall 2002, spring 2000, fall 2000 at MSU]

Data Analysis in Psychological Research (intro stats; undergraduate)

[spring 2006, fall 2003, spring 2001 (honors) at MSU, spring 1998 at University of Minnesota]

Introduction to Industrial and Organizational Psychology (undergraduate)

# [fall 1998-spring 2000 at Purdue University]

### **Professional Service - Internal**

Doctoral Thesis Committees

Soyeon Ahn (in progress)

Laura Sheridan (in progress)

Saiful Nor (in progress)

Christine Scheu (in progress)

Alyssa Friede (in progress)

Stephanie Drzakowski (June 2007)

Brian Kim (Oct 2006)

Jaclyn Nowakowski (Jul 2006)

Meng-Jia Wu (Jul 2006)

Pat Converse (Jul 2005)

Kevin Joldersma (Aug 2005)

Linda Chard (Apr 2005)

Chien-Ming Cheng (Feb 2005)

Sally Theran (Jul 2003)

Brad Chambers (Apr 2003)

Heewon Sung (Apr 2003)

Darin Wiechmann (Apr 2003)

Aleks Ellis (Oct 2002)

Erica Desrosiers (Nov 2001)

### Master's Thesis Committees

Sarah Pachulicz (chair, in progress)

Elizabeth Oberlander (chair, in progress)

Sonia Ghumman (Oct 2006)

Anna Imus (Jul 2006)

Heather Trobert (Apr 2006)

Stephanie Merritt (Mar 2005)

Brian Kim (Aug 2004)

Jacqueline Nowakowski (May 2004)

Lauren Ramsay (Oct 2003)

Chris Kelly (Sep 2003)

Mike Gillespie (chair, Jun 2003)

Marisa Sturza (Jun 2003)

Janet Solomon (May 2003)

Hanh Nguyen (Apr 2003)

Kerrie Vanden Bosch (Dec 2002)

Pat Converse (chair, May 2002)

Jill Kmet (Mar 2000)

First-Year I/O Project

Mike Braun (2007-08)

Brady Firth (2007-08)

Elizabeth Oberlander (2004-05) Sonia Ghumman (2003-04) Dustin Jundt (2002-03) Brian Kim (2001-02) Mike Gillespie (2000-01)

Honors Thesis Committees
Mike Daniels (December 2007)
Haritha Reddy (Aug 2006)
Jeffrey Pink (Aug 2005)
Hillary Justin (Aug 2005)
Shannon McKenney (May 2005)
Arthur Sandt (May 2005)
Jeff Pink (May 2005)
Alison Murray (Sep 2004)
Nancy Rayel (chair, May 2004) Andrews Undergraduate Research Award Amanda Woods (May 2004)
Janna Wittenberg (July 2003)
Kristen Culbert (May 2003)
Elizabeth Livorine (May 2003)

McNair Students
Tanisha Newton (2004)

# Michigan State University

I/O Graduate Admissions Chair (2007-08), Department Undergraduate Curriculum Committee (2007-08), Department Multicultural Committee (2007-08), I/O Website Committee (2001-present), Department Technology Committee (2001-03), Department Colloquium Committee (2001-03), Department Multicultural Initiative Committee (2002-03), Evaluation Sciences Job Search Committee (2002-03), ISS Hewlett Fellows Committee (2001-03)

## Purdue University

College Curriculum Committee (1999-2000), College Grievance Committee (1999-2000), Department Admissions & Awards Committee (1999-2000), Department Teaching Excellence Committee (1999-2000), Department Psi Chi Advisor (1999-2000), Department Undergraduate Psychology Newsletter Editor (1999-2000), Department I/O Admissions Chair (1999-2000), Department: Admissions & Awards Committee (1998-99), Human Subjects Committee (1998-99), I/O Admissions Chair (1998-99)

## **Invited University Talks**

Rice University, Department of Psychology, spring 2008
Georgia Tech University, Department of Psychology, fall 2006
Wayne State University, Department of Psychology, fall 2006
University of Canterbury (Christchurch, NZ), Department of Psychology, Sabbatical Visit, Sep-Oct 2006

Central Michigan University, I/O Psychology, spring 2005

Wayne State University, I/O Psychology, spring 2002 University of Applied Sciences, Lüneburg Germany, summer 2002 Bowling Green State University, summer 2001

### Media Releases

Navy Research Protections Update, Feb/Mar 2007, "SYRUS, Understanding individual differences in multitasking performance"

The State News (MSU student paper), 7/31/2006, "Professors find ways to predict student success," by Kathleen Polesnak

MSU Today, 7/14/06, "College success predictors go beyond test scores, GPAs," by Jeff Koch *New York Times*, 1/18/04, "The SAT III?" by Cecilia Simon *Boston Globe*, 8/8/2003, "Broader, Varied SAT Advocated" by Ellen Barry